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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,342	10/13/2003	William T. Dalebout	13914.875	1258

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EXAMINER

HWANG, VICTOR KENNY

ART UNIT PAPER NUMBER

3764

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,342

Applicant(s)

DALEBOUT ET AL.

Examiner

Victor K. Hwang

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040202.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "35" shown in Fig. 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: in paragraph [048], lines 1 and 5, "76" presumably should be changed to --74--. Additionally, throughout the specification and claims, the use of the term "cam" is unclear since it is inconsistent with the art accepted meaning of "cam". A "cam" is generally defined as the portion of a mechanical linkage that imparts a prescribed motion to an output linkage, called the follower. What Applicant has described as cam 22a,b would appear to be more accurately described as a

cam follower and the raised portion 68 of the push rod 54 more closely resembles a cam surface. See the cited article "Cam mechanism" by Adams, DP. The term "cam" is also used in the art to describe structure that performs as a wedge due to an eccentric periphery to frictionally lock elements together, such as a cam lock used on quick release hubs on bicycle wheels. Applicant's "cam" does not appear to operate as this type of cam either. Again, it would appear that the raised portion 68 of the push rod 54 might resemble this second understanding of "cam" in the art. For purposes of examination, the use of the term "cam" in this application, as best understood by the Examiner, means "a follower" to which a prescribed motion has been imparted.

Appropriate correction and/or clarification is required.

Claim Objections

3. Claim 16 is objected to because of the following informalities: in line 1, "14" presumably should be changed to --15-- to provide proper antecedent basis for "the cam" on lines 1-3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an

application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 6, 9, 10, 12, 13, 17, 18 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by *Speyer* (US Pat. 3,825,253). *Speyer*'253 discloses a weight lifting system comprising a handle 16 having first and second opposing ends, the opposing ends having a hollow interior; a plurality of weight plates 10, each weight plate having an aperture 11 therethrough; and first and second locking mechanisms configured to selectively couple the weight plates to the respective opposing ends of the handles, at least one of the first and second locking mechanisms comprising a moveable cam 24. The cam is configured to be selectively engaged with an interior surface of the handle. The cam selectively moves between a locked position and an unlocked position within the interior of the handle by rotating knob 22. The cam 24 is located at the end of an elongate sleeve 19 opposite the knob 22 and is selectively inserted into the hollow ends of the handle. The cam 24 is eccentrically mounted relative to a rod 26 that is secured to the sleeve so that turning of the sleeve and rod causes turning of the cam 24 within the hollow handle 16 to result in a frictional securing of the sleeve to the handle. The weights 10 have protuberances 13 to permit nesting within adjacent weights.

6. Claims 1-3, 5, 6, 8, 9 and 12-22 are rejected under 35 U.S.C. 102(b) as being anticipated by *Brice* (US Pat. 5,628,716). *Brice* discloses a weight lifting system comprising a handle 12 having first and second opposing ends, the opposing ends having a hollow interior 28; a plurality of weight plates 30, each weight plate having an aperture 32 therethrough; and first and second locking mechanisms configured to selectively couple the weight plates to the

opposing ends of the handle, the locking mechanisms each including a rotating member 60 that selectively engages an interior surface of the handle. The rotating member comprises a "cam," as best understood by the Examiner, since it follows a prescribed motion imparted to it by a hex key (the rod). The "cam" has threads thereon to selectively engage the threads of the interior surface of the handle and move between locked and unlocked positions by turning of the "cam." The "cam" has body portions which are slanted, i.e. the head or the threads, and also includes an elongate portion to extend through the weight plates and into the interior surface of the handle.

7. Claims 1, 4, 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by *Bowman et al.* (US Pat. Pub. 2003/02322704 A1). *Bowman et al.* discloses a weight lifting system comprising a handle 4 having first and second opposing ends, the opposing ends having a hollow interior (see Figs. 2 or 4); a plurality of nesting weight plates 3, each weight plate having an aperture therethrough; and first and second locking mechanisms configured to selectively couple the weight plates to the respective opposing ends of the handle, at least one of the first and second locking mechanisms comprising a moveable cam 13 or 8. Each locking mechanism comprises a sleeve 9, the cam 8 being rotatably coupled to the sleeve, and a push rod 7 that slides within the sleeve and selectively contacts different portions of the cam 8 so as to selectively position the cam 8. The cam 8 or 13 has a slanted body. The cam 8 or 13 is selectively actuated through the use of a push rod 1 or 7.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Speyer* (US Pat. 3,825,253) in view of *Bowman et al.* (US Pat. Pub. 2003/0232704 A1). *Speyer*'253 and *Bowman et al.* have been discussed above, and such discussion is incorporated herein. *Speyer*'253 discloses the invention as claimed except for the weight plates having a frusto-conical shape. *Bowman et al.* discloses weight plates having a frusto-conical shape permitting the weight plates to nest within each other. The convex configuration of the weights permits nesting and enhanced stability of the weight lifting system (paragraph [0036]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the nesting weight plates of *Speyer*'253 with a frusto-conical shape, so that the weight plates are further nested within one another and to enhance stability of the weight lifting system. Furthermore, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Allowable Subject Matter

10. Claim 24 is allowed over the prior art of record.

11. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose the push rod selectively contacting different portions of the moveable member such that movement of the push rod selectively positions the moveable member into a locked position or an unlocked position.

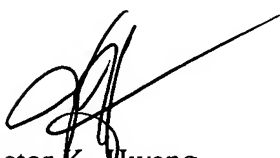
Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (571) 272-4976. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time.

The facsimile number for submitting papers directly to the examiner for informal correspondence is (571) 273-4976. The facsimile number for submitting all formal correspondence at this time is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on (571) 272-4835.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Victor K. Hwang
December 10, 2004


JUSTINE R. YU
SUPERVISORY PATENT EXAMINER
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12/11/04